

**Notice of Rulemaking Hearing**  
**Department of Environment and Conservation**  
**Division of Water Supply**

There will be a hearing before the Division of Water Supply Staff representing the Water Quality Control Board of the Department of Environment and Conservation to hear comments from the public concerning amendments to the Regulations for Public Water Systems and Drinking Water Quality Chapter 1200-5-1 pursuant to T.C.A. 68-221-701 et seq. The proposed amendments were drafted primarily to incorporate into state regulations the revised fire hydrant color coding, turbidity monitoring, and water line disinfection practices. Other minor housekeeping corrections are also being proposed.. The hearing will be conducted in the manner prescribed by the Uniform Administrative Procedures Act, Tennessee Code Annotated Section 4-5-204. The hearings will take place at the following locations on the dates and times indicated below:

Fleming Training Center  
2022 Blanton Drive  
Main Auditorium  
Murfreesboro, TN  
10:00 am  
November 23, 2004

Written comments will be also considered if received at the Division of Water Supply, 401 Church Street, Nashville, TN 37243-1549 by the close of business November 30, 2004.

Individuals with disabilities who wish to participate in these proceedings (to review these filings) should contact the Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such participation. Such contact may be in person, by writing, telephone, or tother means and should be made no less than (10) days prior to the scheduled meeting date to allow time for the Department to reasonably provide such aid or service. Contact the ADA Coordinator at 1866-253-5827 for further information. Hearing impaired callers may use the Tennessee Relay Service (1-800-848-0298).

For a copy of the entire text of this notice of rulemaking hearing, contact the nearest office of the Tennessee Division of Water Supply at 1-888-891-8332 or the central office of the Division at 615-532-0191. Complete text of the proposed Rules may also be found by visiting the Department of Environment and Conservation's Web site at <http://www.state.tn.us/environment/dws/>.

---

**Substance of the Rulemaking Hearing Rules**  
**of**  
**Tennessee Department of Environment and Conservation**  
**Division of Water Supply**  
**Chapter 1200-5-1**  
**Public Water Systems**  
  
**Amendments**

**Brief Summary of Rule**

Rule 1200-5-1-.03 Scope is amended by deleting the existing language in its entirety and substituting the following language so that as amended the rule shall read:

These rules will apply to all public water supply systems that provide water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen (15) service connections

or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. A public water supply system is either a community water system or a non-community water system. A community water system is a public water supply system which serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents. A non-community water system is a public water supply system that is not a community water system and which generally serves a transient population such as hotels, motels, restaurants, camps, service stations churches, industry, etc. A Non-Transient Non-Community Water System is a non-community water system that regularly serves at least 25 of the same persons over six (6) months per year. These rules do not apply to public water systems which meet all of the following criteria:

- (1) consists only of distribution and storage facilities (and does not have any collection and treatment facilities);
- (2) obtains all of its water from, but is not owned or operated by, a public water system to which such regulations apply;
- (3) does not sell water to any person; and
- (4) is not a carrier which conveys passengers in interstate commerce.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Paragraph (8) of Rule 1200-5-1-.05 Supervision of Design and Construction is amended by adding the following language so that as amended in its entirety the paragraph shall read:

- (8) Ownership and Operational Organization – No person shall operate a public water system without notifying the Division of Water Supply prior to placing the new system in operation. Any person operating a public water system other than a municipality, any agency or instrumentality of the United States, any facility owned and operated by the State of Tennessee, or any organization otherwise exempt by law must have a charter or appropriate authorization lawfully issued as set forth in one or more of the following:

Utility District – T.C.A. 7-82-101 et seq.

General Corporation Act – T.C.A. 48 -1-101 et seq.

Tennessee Regulatory Authority – T.C.A. 65-4-101 et seq.

Urban Type Public Facilities – T.C.A. 5-16-101 et seq.

All public water systems shall comply with all laws, rules and regulations, and policies of the Department. Construction modification and treatment processes must be approved in accordance with all federally designated best available technologies and Tennessee Laws. Every public water system shall, within thirty (30) days following any change in ownership or operation of the system, file a written report of such change in ownership or operation with the Department. Such report shall, at a minimum, contain the name, home address, business address, and home and business phone numbers of the person assuming ownership or operation of the system, and the date such change of ownership or operation became effective.

All persons owning or operating a public water system shall keep the Department advised of their current address and must readily accept all mail sent to them by the Department. For purposes of this Rule, registered or certified mail sent with proper postage to the registered

owner or operator's last known address shall be considered adequate notification regardless of whether is accepted or returned unclaimed.

Because of the Department's statutory duty to supervise the construction, operation, and maintenance of public water systems, and because written communication is a necessary aspect of such supervision, an owner or operator's refusal to accept mail or failure to claim registered or certified mail is a violation of this Chapter and may result in enforcement action.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Paragraph (11) only of Rule 1200-5-1-.05 Supervision of Design and Construction is amended by deleting the existing language in its entirety and adding new language so that as amended the paragraph shall read:

- (11) Turbidimeters - All community water systems using ground water formations under the direct influence of surface water, and serving more than 50 connections or 150 individuals, shall be required to install turbidity monitoring equipment with power cutoff ability and recording unit. Those systems not included in the above may be required to install turbidity monitoring devices if the Department finds that the system cannot meet the microbiological standard, the turbidity can be seen without an instrument, or there is an outbreak of illness that may be water related. All filter plants serving community water systems shall be required to have continuous recording turbidimeters on the filter effluent line(s). Recorders shall be limited to two pens and two filters and shall use a scale of 0 to 2.0 NTU.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Paragraph (13) of Rule 1200-5-1-.05 Supervision of Design and Construction is amended by adding the following language so that as amended in its entirety the paragraph shall read:

- (13) Delegation of Plans Review Authority - Under Section 68-221-706 of the Tennessee Code Annotated, any unit of local government may petition the Commissioner for certification to review and approve plans for water distribution facilities within its jurisdiction. The unit of local government must have adequate experience and expertise in water distribution and must adopt standards and impose requirements which are at least as stringent as the Departments. The request for certification must be in writing and contain at least the following:
  - (a) The names of the individual(s) responsible for the review and approval together with his/her experience and education. This person(s) must be employed by the unit of local government and be a registered professional engineer in Tennessee.
  - (b) A copy of the standards, requirements and design criteria legally adopted and enforceable by the unit of local government.
  - (c) The type of projects the unit of local government wishes to receive certification to review. This may include but is not limited to water lines, distribution pumping stations and distribution storage tanks.
  - (d) Procedures for maintaining records of all projects reviewed and approved by the unit of local government.

- (e) The wording to be used on the approval stamp.
- (f) Plans review authority fee.

The Division of Water Supply will be responsible for reviewing the application for certification and shall have up to 60 days from the receipt of the complete application to make a written response. Units of local government will not be certified to review projects involving state or federal funds, raw water pump stations, new water sources, treatment facilities, sludge handling facilities, or any project designed by the staff of the local government. Any unit of local government which receives certification for plans review shall submit one copy of any plan documents it has approved to the Division of Water Supply. This shall be done within 10 days of the local government's approval. The commissioner may periodically review the unit of local government's plans review program and prescribe changes as deemed appropriate. The Division of Water Supply may execute a written agreement with a unit of local government which has received plans review certification. Failure to comply with the terms of the agreement may result in revocation of the plans review certification.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Subparagraph (c) of paragraph (1) of Rule 1200-5-1-.07 Monitoring and Analytical Requirements is amended by the addition of new language so that as amended it shall read:

- 3. Microbiological sampling shall be conducted in accordance with the approved sampling plan.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Subparagraph (g) of paragraph (1) of Rule 1200-5-1-.07 Monitoring and Analytical Requirements is amended by deleting the existing language in its entirety and substituting the following language so that as amended the rule shall read:

- (g) Special purpose samples, such as those taken to determine whether disinfection practices are sufficient following pipe placement, replacement, or repair, shall not be used to determine compliance with the MCL for total coliforms in 1200-5-1-.06(4). Repeat samples taken pursuant to paragraph (2) of this section are not considered special purpose samples, and must be used to determine compliance with the MCL for total coliforms in Rule 1200-5-1-.06(4). Repeat samples must be taken following any positive quality assurance samples from the distribution system. Quality assurance samples are coliform samples taken from the distribution system by public water systems with certified bacteriological laboratories and submitted to the state laboratory for analysis to verify proper analytical methods are being used by the public water system laboratory. Quality assurance samples are the same as a routine distribution sample and count toward compliance.

#### Amendments

Subparagraph (e) of paragraph (2) of Rule 1200-5-1-.07 Monitoring and Analytical Requirements is amended by deleting the existing language in its entirety and substituting the following language so that as amended the rule shall read:

- (e) If a system normally collecting fewer than five routine samples per monitoring period has one or more total coliform-positive samples and the Department does not invalidate the sample(s) under 1200-5-1-.07(3), it must collect at least five routine samples during the next month the system serves water to the public.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Subparagraph (c) of paragraph (4) of Rule 1200-5-1-.07 Monitoring and Analytical Requirements is amended by deleting the existing language in its entirety and substituting the following language so that as amended the rule shall read:

- (c) Sanitary surveys must be performed by the state. The system is responsible for ensuring the survey takes place.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Paragraph (1) only of Rule 1200-5-1-.08 Turbidity Sampling and Analytical Requirements is amended by deleting the existing language in its entirety and by the addition of the following language so that as amended it shall read:

- (1) Ground water sampling - Samples shall be taken by suppliers of water that serve more than 50 connections or that have been directed to conduct monitoring under Rule 1200-5-1-.05(11) for both community water systems and non-community water system at a representative entry point(s) to the water distribution system at least once per day for the purpose of making turbidity measurements to determine compliance with Regulation 1200-5-1-.06(3). Public water systems using water from a source not under the direct influence of surface water are not required to monitor turbidity unless directed to do so under the provisions of 1200-5-1-.05(11).

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Paragraph (1) of Rule 1200-5-1-.09 is amended by the addition of a new subparagraph (e) so that as amended it shall read:

- (e) All new systems or systems that use a new source of water that begin operation after January 22, 2004, must demonstrate compliance with the MCL within a period of time specified by the State. The system must also comply with the initial sampling frequencies specified by the state to ensure a system can demonstrate compliance with the MCL. Routine and increased monitoring frequencies shall be conducted in accordance with the requirements of this rule.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202  
Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Subparagraph (d) of Paragraph (1) of Rule 1200-5-1-.10 Organic Chemical Sampling and Analytical Requirements is amended by adding a new part 4. Part 4 shall read as follows:

4. All new systems or systems that use a new source of water that begin operation after January 22, 2004, must demonstrate compliance with the MCL within a period of time specified by the State. The system must also comply with the initial sampling frequencies specified by the state to ensure a system can demonstrate compliance with the MCL. Routine and increased monitoring frequencies shall be conducted in accordance with the requirements of this rule.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202  
Substantive Authority: T.C.A. Sections 68-221-701 et. Seq.

Amendments

Part 5 only of subparagraph (b) of Paragraph (6) of Rule 1200-5-1-.11 Radionuclide Sampling and Analytical Methods is amended by deleting the existing language in its entirety and substituting new language so that as amended it shall read:

5. For community water systems, if the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity exceeds the screening level, an analysis of the sample must be performed to identify the major radioactive constituents present in the sample and the appropriate doses must be calculated and summed to determine compliance with 1200-5-1-.06(5)(b)1, using the formula in 1200-5-1-.06(5)(b)2. Doses must also be calculated and combined for measured levels of tritium and strontium to determine compliance.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202  
Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amentments

Paragraph (1) only of Rule 1200-5-1-.17 Operations and Maintenance is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

- (1) All community water systems which are designated as a surface supply and classified as a filtration system and all iron removal plants which use gravity filters must have an operator in attendance and responsible for the treatment process when the plant is in operation. Gravity iron removal plants which have installed continuous monitoring equipment including equipment for turbidity and chlorine residual with alarms and/or shutdown ability may seek approval from the Department to operate the treatment plant in an automated mode without an operator in attendance. All iron removal plants with pressure filters and using a ground water source from an approved sand and gravel formation will not be required to have an operator in attendance during all periods of operation provided suitable protection, acceptable to the Department, is provided.

Non-community water systems which are classified as a surface supply will be required to have a full time operator in attendance unless certain continuous monitoring equipment is installed.

Pursuant to Tennessee Code Annotated 68-221-904, all operators in direct responsible charge of a water supply system, including the treatment plant and/or distribution system, must be certified by the Department as competent to operate same.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Paragraph (6) of Rule 1200-5-1-.17 Operations and Maintenance is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

- (6) Pursuant to Section 68-221-711(6) the installation, allowing the installation, or maintenance of any cross-connection, auxiliary intake, or bypass is prohibited unless the source and quality of water from the auxiliary supply, the method of connection, and the use and operation of such cross-connection, auxiliary intake, or bypass has been approved by the Department. The arrangement of sewer, soil, or other drain lines or conduits carrying sewage or other wastes in such a manner that the sewage or waste may find its way into any part of the public water system is prohibited.

All community water systems must adopt an ordinance or policy prohibiting all of the above and submit a copy of the executed ordinance or policy to the Department for approval. All community water systems shall develop a written plan for a cross-connection control program to detect and eliminate or protect the system from cross-connections. The written plan must be approved by the Department.

After adoption and approval of the cross-connection ordinance or policy and plan, each community water system must establish an ongoing program for the detection and elimination of hazards associated with cross-connections. Records of the cross-connection control program must be maintained by the water supplier and shall include such items as date of inspection, person contacted, recommendations, follow-up, and testing results.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Paragraph (8) of Rule 1200-5-1-.17 Operations and Maintenance is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

- (8) Public water systems, construction contractors and engineers shall follow and document sanitary practices used in inspecting, constructing or repairing water lines, finished water storage facilities, filters and wells. The documentation shall include bacteria sample results, construction logs, standard operating procedures and may include photographs where appropriate. All pipes, tanks, filters, filter media, and other materials used to convey or store drinking water shall be protected from contamination when stored, transported, constructed, installed and properly disinfected prior to being placed into service. Any disinfectant used to disinfect shall be NSF approved and used in a manner that assures sufficient contact time

and concentration to inactivate any pathogens present. Bacteriological results including line repair records indicating adequacy of disinfection shall be maintained on file by the water system for five years. All public water systems, contractors, and engineers shall prepare and follow standard disinfection procedures approved by the state when inspecting, maintaining, repairing or constructing lines, tanks, filters and wells.

All materials used for new or repaired water lines, storage facilities, filters, filter media, and wells will be inspected prior to use for any evidence of gross contamination. Any contamination observed shall be removed and the materials protected during installation.

Bacteriological samples will be collected and analyzed to verify the effectiveness of the disinfection practices prior to placing new facilities in service. Bacteriological samples shall be collected in a manner to determine the effectiveness of the installation process including protecting the pipe material during storage and installation, flushing and disinfecting the line. This can be demonstrated by collecting two sets of microbiological samples 24 hours apart or collecting a single set of microbiological samples 48 hours or longer after flushing the highly chlorinated water from the lines. In either case microbiological samples in each set will be collected at approximately 2,500-foot intervals with samples near the beginning point and at the end point. Where sanitary conditions were not maintained before, during or after construction, an additional bacteriological sample shall be collected from a location representing the water from the contaminated area. Unsanitary conditions include failure to document the sanitary handling of materials, conducting construction inspections and maintaining records, and documenting sanitary practices during construction and other hazards such as trench flooding during construction.

Drinking water mains, storage facilities and filters that have been partially dewatered during inspection or repair shall, after the repair or inspection is completed, be flushed, disinfected, and flushed again prior to placing it back in service. Bacteriological samples shall be collected immediately or as soon as possible after the repair is completed and from a location representing the water contained in the repaired line, tank or filter. Procedures to insure that water containing excessive concentrations of disinfectant is not supplied to the customers or discharged in such manner as to harm the environment shall be implemented. The repaired facility may be returned to service prior to obtaining bacteriological results. If the repaired facility yields positive bacterial samples, additional flushing, disinfection and bacteriological sampling shall be repeated until the water is coliform free.

Inspectors, contractors, operators, public water systems or engineers that fail to document and follow adequate disinfection procedures, or detect bacteria after service has been restored, or fail to collect bacteriological samples during repairs, inspections or maintenance activities that potentially would compromise the microbial quality of the water shall issue a boil water advisory to the customers served by that portion of the public water system prior to returning the facility to service. The boil water advisory shall remain in effect until satisfactory microbial test results are obtained.

In lieu of writing their own disinfection standard operating procedures, public water systems, engineers and contractors may choose to follow the latest edition of the AWWA standards C-651, C-652 or equivalent methods provided the method has been approved in writing by the department and is available during the inspection, construction, maintenance or repair activity.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments



Subparagraph (c) only of Paragraph (17) of Rule 1200-5-1-.17 Operations and Maintenance is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

- (c) Duplicate or backup equipment shall be available as necessary to maintain the production of water meeting drinking water standards. Backup equipment shall be available for feeding all chemicals necessary for adequate water treatment.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Paragraph (18) of Rule 1200-5-1-.17 Operations and Maintenance is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

- (18) All community water systems planning to or having installed hydrants must protect the distribution system from contamination. All water mains designed for fire protection must be six inches or larger and be able to provide 500 gallons per minute with 20 pounds per square inch residual pressure. Fire hydrants shall not be installed on water mains less than six inches in diameter or on water mains that cannot produce 500 gpm at 20 psi residual pressure unless approval is obtained from the Department.

The governing body of a water system that proposes to install fire hydrants on lines less than six inches in diameter or that proposes or has fire hydrants in lines that cannot provide 500 gpm at 20 psi residual must adopt an ordinance or policy on the installation and use of fire hydrants by January 1, 2006. This ordinance or policy must include the color-coding system listed below for fire hydrants that cannot produce the required fire flow at the required residual pressure:

Class C hydrants (hydrant unable to deliver a flow of 500 gallons per minute at a residual pressure of 20 pounds per square inch (psi) shall be painted black in their entirety by January 1, 2007.

Public water systems are encouraged to use the following color coding system:

Class B hydrants (hydrant delivers a flow of 500 to 999 gallons per minute at a residual pressure of 20 pounds per square inch, or greater) shall have the barrels painted chromium yellow, and all outlet caps and bonnets painted orange by 2010.

Class A hydrants (hydrant delivers a flow of 1,000 to 1,499 gallons per minute at a residual pressure of 20 pounds per square inch, or greater) shall have the barrels painted chromium yellow, and all outlet caps and bonnets painted green 2010.

Class AA hydrants (hydrant delivers a flow of greater than 1,500 gallons per minute at a residual pressure of 20 pounds per square inch, or greater) shall have the barrels painted chromium yellow, and all outlet caps and bonnets painted light blue by 2010.

In addition to adopting an ordinance or policy, the water system must provide yearly notification by certified mail to each fire department that may have reason to utilize the hydrants that fire hydrants painted black (Class C hydrants) cannot be connected directly to a pumper fire truck. Fire Departments may be allowed to refill the booster tanks on any fire apparatus from an available hydrant by using the water system's available pressure only (fire

pumps shall not be engaged during refill operations from a Class C hydrant). Water systems are encouraged to flow test all hydrants periodically to insure that existing hydrants can produce flows of 500 gpm at 20-psi residual pressure. Flow test records should be maintained for 10 years.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Section I. A. only of Appendix A of Rule 1200-5-1-.19 Notification of Customers is amended by the addition of new parts 8 and 9 so that as amended it shall read:

8.Filter Backwash Recycling Rule Violations	2	1200-5-1-.31(9)(c)	3	1200-5-1-.31(9)(b) and (d)
9.Long Term 1 Enhanced Surface Water Treatment Rule Violations	2	1200-5-1-.31 (4)	3	1200-5-1-.31(6)

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Endnote 1 of Appendix A of Rule 1200-5-1-.19 Notification of Customers is amended by deleting endnote 1 in its entirety and by substituting the following language so that as amended it shall read:

1. Violations and other situations not listed in this table (e.g., failure to prepare Consumer Confidence Reports), do not require notice, unless otherwise determined by the department. The department may, at its option, also require a more stringent public notice tier (e.g., Tier 1 instead of Tier 2 or Tier 2 instead of Tier 3) for specific violations and situations listed in this Appendix, as authorized under 1200-5-1-.19(2)(a) and (3)(a).

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Endnote 8 of Appendix B of Rule 1200-5-1-.19 Notification of Customers is amended by deleting endnote 8 in its entirety and by substituting the following language so that as amended it shall read:

- 8 There are various regulations that set turbidity standards for different types of systems, including 1200-5-1-.08 and 1200-5-1-.31. For systems subject to the IESWTR (systems serving at least 10,000 people, using surface water or ground water under the direct influence of surface water), that use conventional filtration or direct filtration, after January 1, 2002, the turbidity level of a system's combined filter effluent may not exceed 0.3 NTU in at least 95 percent of monthly measurements, and the turbidity level of a system's combined filter effluent must not exceed 1 NTU at any time. For systems subject to the LT1EWSTR (systems serving fewer than 10,000 people, using surface water or ground water under the direct influence of surface water), that use conventional filtration or direct filtration, after January 1, 2005, the turbidity level of a system's combined filter effluent may not exceed 0.3 NTU in at least 95 percent of monthly measurements, and the turbidity level of a system's combined filter effluent must not exceed 1 NTU at any time. Systems subject to the IESWTR/LT1ESWTR using technologies other than conventional, direct, slow sand, or diatomaceous earth filtration must meet turbidity limits set by the division.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Subparagraph (g) only of Paragraph (1) of Rule 1200-5-1-.20 Record Maintenance is amended by the deleting the existing language in its entirety and substituting the following language so that as amended subparagraph shall read:

- (g) Daily worksheets, strip charts, and shift logs used in the production of monthly operation reports or operation control of the plant shall be maintained for five years or the next sanitary survey whichever is longer.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Paragraph (1) of Rule 1200-5-1-.20 Record Maintenance is amended by the addition of a new subparagraph (j) so that as amended it shall read:

- (j) Any system subject to the requirements of 1200-5-1-.33 shall retain on its premises original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, State determinations, and any other information required by 1200-5-1-.33(2) through (9). Each water system shall retain the records required by this section for no fewer than 12 years

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Rule 1200-5-1-.21 Monitoring for Corrosivity Characteristics is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

#### 1200-5-1-.21 Monitoring for Corrosivity Characteristics

- (1) Community water supply systems shall identify whether the following construction materials are present in their distribution system and report to the Department.
  - (a) Piping, solder, caulking, interior lining of distribution mains, service lines, and home plumbing made of lead;
  - (b) Piping and alloys, service lines, and home plumbing made of copper;
  - (c) Galvanized piping, service lines, and home plumbing;
  - (d) Ferrous piping materials such as cast iron and steel;
  - (e) Asbestos cement pipe;
  - (f) Vinyl lined asbestos cement pipe;
  - (g) Coal tar lined pipes and tanks.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Rule 1200-5-1-.22 Trihalomethane is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

1200-5-1-.22 Reserved

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Rule 1200-5-1-23 Total Trihalomethane Sampling, Analytical and Other Requirements is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

1200-5-1-.23 Reserved

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Rule 1200-5-1-.26 Volatile Organic Chemical Sampling, Analytical and Other Requirements is amended by the addition of new language as Paragraph (8). Paragraph (8) read as follows:

- (8) All new systems or systems that use a new source of water that begin operation after January 22, 2004, must demonstrate compliance with the MCL within a period of time specified by the State. The system must also comply with the initial sampling frequencies specified by the state to ensure a system can demonstrate compliance with the MCL. Routine and increased monitoring frequencies shall be conducted in accordance with the requirements of this rule.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Rule 1200-5-1-.27 Vulnerability Analysis is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

1200-5-1-.27 Reserved

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Rule 1200-5-1-.28 Special Monitoring for Organic and Inorganic Contaminants is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

1200-5-1-.28 Reserved

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Rule 1200-5-1-.30 Performance Bonds is amended by deleting the existing language in its entirety and substituting the following language so that as amended the paragraph shall read:

1200-5-1-.30 Reserved

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Subparagraph (d) of Paragraph (1) of Rule 1200-5-1-.31 Filtration and Disinfection is amended by deleting the existing language in its entirety and by substituting the following language so that as amended the part shall read:

- (d) Each public water system using a surface water source or a ground water source under the direct influence of surface water must be operated by certified personnel who meet the requirements of the Tennessee Water Environmental Health Act T.C.A. 68-221-901 et. seq. and Certification Board Regulations contained in Chapter 1200-5-3.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Part 1 only of subparagraph (b) of Paragraph (4) of Rule 1200-5-1-.31 Filtration and Disinfection is amended by deleting the existing language in its entirety and by substituting the following language so that as amended part 1 shall read:

1. Representative samples of a system's filtered water effluent must be less than or equal to 1 NTU in at least 95 percent of the measurements taken each month. In systems using slow sand filtration, if the Department determines there is no significant interference with disinfection at a higher turbidity level, the Department may substitute this higher turbidity limit for a system.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Subparagraph (c) only excluding parts 1, 2 and 3 of Paragraph (4) of Rule 1200-5-1-.31 Filtration and Disinfection is amended by deleting the existing language in its entirety and by substituting the following language so that as amended the part shall read:

- (c) By December 31, 2001, subpart H systems that use conventional or direct filtration and serve 10,000 or more persons and by January 1, 2005, subpart H systems serving fewer than 10,000 persons shall employ filtration treatment that:

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Subparagraph (d) only of Paragraph (4) of Rule 1200-5-1-.31 Filtration and Disinfection is amended by deleting the existing language in its entirety and by substituting the following language so that as amended the part shall read:

- (d) A public water system may use a filtration technology not listed in subparagraph (c) or in 1200-5-1-.31(4)(b) if it demonstrates to the State, using pilot plant studies or other means, that the alternative filtration technology, in combination with disinfection treatment that meets the requirements of 1200-5-1-.17(30), consistently achieves 99.9 percent removal and/or inactivation of Giardia lamblia cysts and 99.99 percent removal and/or inactivation of viruses, and 99 percent removal of Cryptosporidium oocysts, and the Department approves the use of the filtration technology. For each approval, the Department will set turbidity performance requirements that the system must meet at least 95 percent of the time and that the system may not exceed at any time at a level that consistently achieves 99.9 percent removal and/or inactivation of Giardia lamblia cysts, 99.99 percent removal and/or inactivation of viruses, and 99 percent removal of Cryptosporidium oocysts. The maximum allowable turbidity limits for subpart H systems serving fewer than 10,000 persons using an alternative filtration technology excluding slow sand and diatomaceous earth cannot exceed 1 NTU in 95 percent of the samples taken each month or 5 NTU on any single sample.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Part 1 of subparagraph (c) of Paragraph (5) of Rule 1200-5-1-.31 Filtration and Disinfection is amended by deleting the existing language in its entirety and by substituting the following language so that as amended the part shall read:

1. Turbidity as required by 1200-5-1-.31(4) must be continuously measured and recorded on representative samples of the system's combined filtered water while the system serves water to the public. The highest turbidity value obtained during each four-hour period must be reported. A public water system may substitute grab sample monitoring if approved by the State. For any system using slow sand filtration or filtration treatment other than conventional treatment, direct filtration, or diatomaceous earth filtration, the State may reduce the sampling frequency to once per day if it determines that less frequent monitoring is sufficient to indicate effective filtration performance. For systems serving 500 or fewer persons, the State may reduce the turbidity sampling frequency to once per day, regardless of the type of filtration treatment used, if the State determines that less frequent monitoring is sufficient to indicate effective filtration performance. The highest turbidity measured each four hours must be reported according to the following four hour segments: 12:01 a.m. to 4:00 a.m., 4:01 to 8:00 a.m., 8:01 to 12 noon, 12:01 to 4:00 p.m., 8:01 to 12 midnight. The intake of the combined filter effluent turbidity monitor shall be located at or near the entry point to the clearwell or at a location approved by the Department.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Subparagraph (a) of paragraph (2) of Rule 1200-5-1-.32 Fees for Public Water Systems is deleted in its entirety and new language added so that as amended the subparagraph shall read:

- (2) (a) Plans Review Fee - Beginning July 1, 1992, any person submitting non-transient non-community and community water system plans for approval shall be required to pay the fees listed in Parts 1. through 14. below for the purpose of plans review. Transient non-community water systems shall be required to pay the fee listed in part 13. The fees apply to new facilities as well as the expansion or modification of existing facilities. If the submittal includes multiple activities, the fee will be the sum of the fees listed for each individual activity. Approval of plan documents will not be granted until all fees required by Parts 1. through 14. below are paid in full. Units of local government which have been granted plans review authority in accordance with T.C.A. 68-221-706 shall pay an annual fee of \$1,000. Failure of local governments to pay this fee will be cause for the revocation of plans review authority.

<u>Type Activity</u>	<u>Fee Schedule</u>
1. Well or Spring Development	\$ 200
2. Chemical Control Plant	\$ 400
3. Disinfection System	
(i) Gaseous	\$ 300
(ii) Hypochlorinator	\$ 150
4. Filter Plant	\$ 750
5. Pump Station	\$ 250
6. Tank	\$ 225
7. Standard Specifications	\$ 100
8. Tank Coating	\$ 50
9. Sludge Treating	\$ 150
10. Distribution Lines	
(i) 501 to 1000 feet	\$ 50
(ii) Greater than 1000 feet	\$ 100 + \$.01/ft
11. Change Orders	\$ 50
12. Review of Operations and Maintenance Manuals	\$ 150
13. New raw water source and site evaluation for public water systems and water bottling operations.	\$ 300
14. Miscellaneous (Includes other items not specifically mentioned above).	\$ 50

There is no fee for water line extension projects of 500 feet or less in a single year. If the same line is extended more than 500 feet in a single year, the fee is due and payable on the length of the entire extension.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

Rule 1200-5-1-.34 Wellhead Protection is amended by deleting it in its entirety and inserting the following in its place:

#### 1200-5-1-.34 Drinking Water Source Protection

##### (1) General Requirements

- (a) The requirements of Rule 1200-5-1-.34 constitute Public Water System Drinking Water Source Protection Regulations, including wellhead protection regulations for public water systems utilizing ground water sources and source protection regulations for public water systems utilizing surface water sources. These regulations establish a statewide program for development and implementation of wellhead protection plans by public water systems (PWS) and source water contamination assessment and planning for surface water supplies. These regulations are intended to protect aquifers and surface

water bodies used as potable water supply sources by public water systems from contamination due to hazardous and/or toxic substances entering the ground water or surface water.

- (b) A PWS using a ground source shall prepare a Wellhead Protection Plan which determines a wellhead protection area and identifies all potential anthropogenic sources of contaminants which may have any adverse effect on the health of persons and potential contaminant sources within the area. Each PWS must implement the approved Wellhead Protection Plan and a Wellhead Protection Program. The wellhead protection plan shall be submitted for approval by the Department and be available for inspection during subsequent sanitary surveys or other inspections. Updated plans shall be submitted to the Department as required in 1200-5-1-.34(1)(g)3. The contaminant source inventory for ground water based systems shall be updated annually and be available for inspection during subsequent sanitary surveys or other inspections. A PWS using a surface water source shall prepare and annually update a contaminant source inventory of all potential anthropogenic sources of contaminants which may have any adverse effect on the health of persons and potential contaminant sources within the source water protection area. The contaminant source inventory and subsequent updates for surface water based systems shall include the notifications roster, response committee designees and other portions of the emergency operations plan pertaining to source water protection implementation. The contaminant source inventory with the required information from the emergency operations plan shall be submitted to the Department every three years starting on December 31, 2006 and be available for inspection during subsequent sanitary surveys or other inspections.
- (c) The requirements specified in this rule shall be considered minimum requirements and shall not prevent the PWS from taking additional steps as desired to protect its wells, springs, wellfields or surface water intakes.
- (d) Terms not specifically defined in this rule shall be as defined in the Tennessee Safe Drinking Act (T.C.A. 68-13-701 et seq.) and the Tennessee Water Quality Control Act (T.C.A. 69-3-101 et seq.). For purposes of this rule, the following terms are defined as follows:
  - 1. "Abandoned well" means any well the use of which has been accomplished or permanently discontinued because necessary operating equipment has been removed or a well is in such a state of disrepair that continual use for the purpose for which it was constructed is impractical. A well shall be considered permanently discontinued if it has not been used for a two (2) year period and is not included as a part of the wellhead protection plan as either an emergency backup well or future growth well for the water system. Emergency backup wells and future growth wells must be properly maintained and/or secured. Emergency wells that are not in continuous use must be properly maintained, pumped and tested at least annually.
  - 2. "Aquifer" means a geologic formation, portion thereof, or group of formations (including overlying unconsolidated material) which contains and is capable of yielding a sufficient quantity of ground water to serve as a domestic or public water supply or other use.
  - 3. "Confined Aquifer" means an aquifer bounded above and below by layers of geologic material with sufficiently low hydraulic conductivity to hamper movement of water into and out of the aquifer.



4. "Critical Source Water Protection Zone" means the surface water body and adjacent land area from one half (1/2) mile downstream of the intake to five (5) miles upstream of the public water system intake, including a one thousand (1000) foot corridor parallel to the designated stream banks and any perennial streams which are tributaries to that stream.
5. "Ground Water" means any waters of the State as defined in T.C.A. 69-3-103 (Tennessee Water Quality Control Act), occurring below the surface of the ground not contained by artificial barriers.
6. "Leaky Confined Aquifer" means a confined aquifer whose bounding layer of geologic material of lower hydraulic conductivity is sufficiently permeable to transmit water from the overlying unconfined aquifer into the semi-confined (leaky) aquifer.
7. "Karst" means limestone, shaley limestone, dolomite, and/or shaley dolomite rock terrain characterized by highly directional ground water flow in discrete channels or conduits in the form of solutionally enlarged fractures, faults and/or bedding planes. It is not required for karst surface features to be present in the form of sinkholes, disappearing streams, caves and springs for the karst definition to be applicable. This definition includes both conduit flow conditions and flow conditions through microfractures and along bedding planes. Areas of the State of Tennessee which are considered to meet this definition are further identified in Figure 1.
8. "Source Water Management Zone (SWMZ)" means the surface water body and adjacent area that encompasses the water body, tributaries and adjacent land area more than five (5) miles upstream of a public water system intake that includes the remainder of the appropriate watershed within that hydrologic unit.

Zone A (Inner SWMZ) is the surface water body and adjacent area that is five (5) to fifteen (15) miles upstream of a public water system intake, including a one thousand (1000) foot corridor parallel to the designated stream banks and any perennial streams which are tributaries to that stream.

Zone B (Outer SWMZ) is the surface water body and adjacent area that is more than fifteen (15) miles upstream of a public water system intake, including a one thousand (1000) foot corridor parallel to the designated stream banks and any perennial streams which are tributaries to that stream.
9. "Source Water Protection Area" means the area upgradient of a public water supply source through which contaminants are reasonably likely to reach such water source. "Source water protection areas" specifically include those areas defined as source water protection areas for surface water intakes and wellhead protection areas for public ground water withdrawal sources.
10. "Wellhead Protection Area" means the surface and subsurface area surrounding a waterwell, wellfield or spring supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well, wellfield or spring.

- (e) Each public water system using a ground water source shall complete and maintain its Wellhead Protection Plan within the time set forth in 1200-5-1-.34(1)(g). The wellhead protection plan shall include emergency backup wells and wells designated for future growth. Each ground water public water system is designated per size in categories as set forth in Table 1200-5-1-.34(e)(1), below. Size categories are determined by the number of connections and the amount of water produced. The designation of Public Water Supply categories for purposes of Rule 12-5-1-.34 are as follows:

TABLE 1200-5-1-.34(1)(e)1  
PUBLIC WATER SYSTEM (PWS) CATEGORIES

CATEGORY 1:	(a)	Community PWS with less than 100 connections and less than 20,000 gallons per day (gpd) average daily production
	(b)	All Noncommunity PWS
CATEGORY 2:	(a)	Community PWS with 100 to 999 connections and less than 315,000 gpd average daily production.
	(b)	Community PWS with less than 100 connections and 20,000 to 314,999 gpd average daily production.
CATEGORY 3:	(a)	Community PWS with 1000 to 2999 connections and less than 1,000,000 gpd average daily production.
	(b)	Community PWS with less than 1000 connections and 315,000 to 999,999 gpd average daily production.
CATEGORY 4:	(a)	Community PWS with 3,000 or more connections.
	(b)	Community PWS with less than 3,000 connections and 1,000,000 gpd or greater average daily production.

- (f) Each PWS using a ground water source shall perform the following tasks, in accordance with their size category as further set forth in 1200-5-1-.34(2) and in published guidance.
1. Each PWS shall take photographs and perform field measurements, pursuant to the appropriate size category, in the delineation of their wellhead protection area (Zones 1 and 2 below).
  2. Each PWS shall designate two zones of protection for their ground water source:
    - (i) "Wellhead Protection Zone" (Zone 1) -- the zone adjacent to the well or spring where the PWS well or spring actively draws the water which supplies the well or spring, where contamination could enter the aquifer alongside the well casing or be drawn into the cone of depression of the well. The distance for this zone shall be a fixed radius set forth in part 3 of this rule. This zone may be modified by Departmental approval at a later date to reflect hydrogeologic conditions using the same methods acceptable for the Wellhead Management Zone below. Zone 1 requires the highest level of protection.
    - (ii) "Wellhead Management Zone" (Zone 2) -- the zone surrounding the Wellhead Protection Zone which is delineated on the basis of ground water flow direction and recharge, where contamination is reasonably likely to move toward and reach the well or spring. However, the

Wellhead Management Zone for Category 1 systems shall be a fixed radius of 750 feet.

3. The Wellhead Protection Zone (Zone 1) shall be designated as the following radius:
  - (i) Category 1: 250 feet
  - (ii) Category 2: 500 feet
  - (iii) Category 3: 750 feet
  - (iv) Category 4: 750 feet
4. The Wellhead Management Zone (Zone 2) for Category 1 systems shall be designated as the area encompassed from the 250 foot radius (Zone 1) to a 750 foot radius. For PWS Categories 2 through 4, Zone 2 shall be as set forth in Rule 1200-5-1-.34(2).
5. Each PWS shall notify the governing county body and county/regional planning commission of the designation of the Zones in Rule 1200-5-1-.34(1)(f)3. & 4., per the Tennessee Safe Drinking Water Act, T.C.A. 68-221-701 et seq. once a wellhead protection plan has been developed and approved and at each update of the plan. The PWS shall describe the concept of Wellhead Protection and Wellhead Management Zones and provide a topographic map or other suitable map of a scale of 1:24000 (1 inch = 2000 feet) or better with the designated area marked. The PWS shall also provide a statement of the intent to pursue a Wellhead Protection Program, soliciting the governing body and planning commission's cooperation. PWS are encouraged to provide representatives for local emergency planning committees.
6. Each PWS shall perform a Potential Contaminant Source Inventory within its designated Wellhead Protection and Wellhead Management Zones to identify all potential contaminant sources located within those zones. For the purposes of this rule, a potential contaminant source shall be defined as any facility, structure, enterprise, function or activity occurring or present within a wellhead protection or management zone which may, as a result of either the normal or abnormal operation thereof, release to the ground waters any pollutant, material or contaminant substance as defined in T.C.A. 69-3-101 et seq. (Tennessee Water Quality Control Act). Examples of land uses and activities which are considered to be potential contaminant sources will be further described in the guidance document to be published by the Department. The potential contaminant source inventory must be submitted to the Department by the time set forth in 1200-5-1-.34(1)(g).
7. Each PWS shall submit a Wellhead Protection Plan for Department approval. Plans shall consider hazardous chemical use, storage, spill response notification and contingency planning. In addition, plans shall include public education and participation, proposed local ordinances, proposed zoning changes and other institutional controls. The Plans shall also include provisions for periodic updating. The PWS shall implement the Wellhead Protection Plan as set forth in part (g) of this rule.

8. As the Wellhead Protection Plan is implemented, the PWS shall document any land management strategies available to it which have been employed. Documents may include, but are not limited to the following: ordinances, codes, permits, memoranda of understanding, and public education programs.
9. A PWS may apply to the State for an extension of the time frame to submit the wellhead protection plan to the State. The request must be in writing and set forth the basis for the request. A system must provide the following information and data to the Department with a request for an extension:
  - (i) number of wells;
  - (ii) size of the wellfield;
  - (iii) size of zone 1 and zone 2;
  - (iv) technical data;
  - (v) steps and procedures the PWS has implemented to achieve compliance with these rules; and
  - (vi) any other information required by the State.
10. The Department shall determine whether to grant an extension of this requirement. The Department shall consider the following factors in its determination:
  - (i) technical determination of the zone areas; and
  - (ii) the activities the PWS has implemented to achieve compliance with these rules.
11. The Department shall either grant or deny a request for an extension of the timeframe to submit the wellhead protection plan. The term of the extension shall be set by the Department, however, the term of the extension shall not exceed three (3) years. A system may request, in writing, that the extension be continued for an additional three (3) years upon good cause shown. The Department shall review and, where appropriate, revise its determination when relevant data or information becomes available.
12. PWS which do not comply with Rule 1200-5-1-.34 in the development of a Wellhead Protection Plan shall not be eligible for waivers from monitoring requirements for chemicals for which MCL's have been established as set forth in Rule 1200-5-1-.09 and 1200-5-1-.10.
13. A change within the Wellhead Protection area will require an updated Plan. A significant increase in average daily production rates (greater than 25%) and significant new potential contaminant sources shall require alteration of the Plan. For purposes of this rule, a significant potential contaminant source is defined as any facility, structure, enterprise, function or activity occurring or present within a wellhead protection or management zone which due to an activity or the release of contaminant substances resulting from the normal or abnormal operation of such activity, may present an immediate or increased risk of contamination of the ground waters supplying a spring, well, or wellfield. Updates regarding potential contaminant source inventories shall be performed at least every three years or when significant new potential sources are discovered. The revisions should address any changes in the hydrogeology, delineation of the protection areas, potential contaminant sources, and land management strategies. The Department may request an update to the Plan due

to change in hydrogeologic conditions (including increased pumping rates) or changes in potential contaminant sources which may increase the risk of contamination of the PWS.

14. The Department must be notified prior to dye traces being run which may impact a public water system. A dye trace plan must be submitted to the Department for approval. The plan must include the date of the test, the duration of the test, the dye to be injected and any other information the Department requires for evaluation of the test. Dye trace results must also be submitted to the Department.
15. Public water systems utilizing a ground water source in karst and fractured rock with direct recharge points to the aquifer may be required to hire a consultant with expertise in dye tracing to perform a dye trace by Department approved methods where the extent of the existing wellhead protection area is inadequate based on hydrogeologic information or contamination of the water source. Those areas demonstrated to be connected to the well or spring shall be considered Zone 1.
16. The Wellhead Protection Plan shall include a procedure for notifying the Division of any condition which may impact the provisions of the wellhead protection plan or water supply. The PWS shall establish a procedure for notifying the owner or operator of any potential contaminant source which is believed to be discharging substances which may endanger the water supply of the PWS.

This notification shall cite the provisions of the Tennessee Safe Drinking Water Act specifically including the language under prohibited acts in T.C.A. 68-221-711: “(5) The discharge of sewage, or any other waste or contaminant at such proximity to the intake, well or spring serving a public water system in such a manner or quantity that it will or will likely endanger the health or safety of customers of the system or cause damage to the system” and this rule, as well as any local ordinances which implement or support the wellhead protection plan. Such notification to the owner or operator shall also request the owner or operator to abate the activity or discharge. A copy of such notification shall be submitted to the Department.

- (g) A PWS must make the following submissions to the Department in the development and update of a Wellhead Protection Plan within the following timeframe:

1. Water systems with new ground water supply sources shall have source approvals in writing by the Department prior to initiation of operation as a public water supply source. An existing water system that was previously not designated as a public water system shall have sixty (60) days upon notification of the determination as a public water system to submit source approval documentation for the Department’s review. Source approvals shall include a one-mile radius inventory of significant potential contaminant sources for Category 2, 3 and 4 ground water supplies.
2. Category 2, 3 and 4 public water systems shall submit a wellhead protection area for Department approval within 6 months of operation of the new source. Where the source is in close proximity to an existing withdrawal source such that the wellhead protection area does not require modification, a request to include the new source in the existing wellhead protection area may be submitted. Within one (1) year after the initial operation of the new water

source, a contaminant source inventory from within the wellhead protection area and a wellhead protection plan shall be submitted for Department approval. Category 1 ground water PWS shall have wellhead protection plans submitted to the Department within ninety (90) days of initial operation or notification of designation as a public water system by the Department. Each ground water PWS shall notify in writing the governing county body and county/regional planning commission of the designation of the Zones in Rule 1200-5-1-.34(1)(f)3. & 4., under the Tennessee Safe Drinking Water Act, T.C.A. 68-221-701 et seq. upon completion of the wellhead protection plan and at subsequent updates.

3. A review of the potential contaminant source inventory must be performed at minimum annually by the category 2, 3 and 4 systems. Such review shall be documented and kept on file at the water system office. Wellhead protection plans or updates shall be required to be submitted to the Department at three (3) year intervals. Category 1 systems shall perform the reviews as a part of their required submittals to the Department every three years.

- (i) Category 1 systems shall submit their plans in a format acceptable to the Department in a timeframe based on grand division. On or before June 30, 2005, Category 1 systems in the Western Grand Division are required to submit their plans and every three years subsequently. On or before June 30, 2006, Category 1 systems in the Central Grand Division are required to submit their plans and every three years subsequently. On or before June 30, 2007, Category 1 systems in the Eastern Grand Division are required to submit their plans and every three years subsequently. A change in ownership shall require the submission of a new wellhead protection plan or the adoption of the existing wellhead protection plan after revisions within ninety (90) days of the change of ownership.

- (ii) Category 2, 3 and 4 systems shall submit updates and plans in a six (6) year cycle. Once a plan has been submitted, the PWS shall submit an update to the plan three (3) years thereafter. The PWS shall submit a complete new plan with an updated contaminant source inventory six (6) years after the submittal of the previous plan. For water systems in compliance with an approved plan in place at the effective date of this rule, updates of wellhead protection plans in a form acceptable to the Department shall be submitted on or before December 31, 2007. This update shall include a review of the potential contaminant sources within the wellhead protection area. For water systems existing at the effective date of this rule, complete new inventories and plans shall be due on December 31, 2010 and at six (6) year intervals thereafter.

The addition of new significant potential contaminant sources during the annual potential contaminant source inventory review shall require an addendum to be submitted to the Department within 90 days of the review.

- (h) A community PWS using a surface water source must at minimum annually perform a survey within the Critical Source Water Protection Zone for significant potential contaminant sources as well as an inventory of wastewater and stormwater discharges permitted within Zone A of the Source Water Management Zone. Source water inventory updates for community surface water systems existing at the effective date of this rule shall be submitted to the Department on or before December 31, 2006 and at

three (3) year intervals subsequently. New water supply sources shall have source approvals in writing by the Department prior to initiation of operation as a public water supply source. An existing water system that was previously not designated as a public water system shall have sixty (60) days upon notification of the determination as a public water system to submit source approval documentation for the Department's review.

The emergency operations plan for surface water systems shall include a procedure for notifying the Division of any condition which may impact the water source. The PWS shall establish a procedure for notifying the owner or operator of any potential contaminant source which is believed to be discharging substances which may endanger the water supply of the PWS.

This notification shall cite the provisions of the Tennessee Safe Drinking Water Act specifically including the language under prohibited acts in T.C.A. 68-221-711: "(5) The discharge of sewage, or any other waste or contaminant at such proximity to the intake, well or spring serving a public water system in such a manner or quantity that it will or will likely endanger the health or safety of customers of the system or cause damage to the system" and this rule, as well as any local ordinances which implement or support source water protection. Such notification to the owner or operator shall also request the owner or operator to abate the activity or discharge. A copy of such notification shall be submitted to the Department.

(2) Category-Specific Wellhead Protection Requirements

(a) Category 1 PWS

1. Photographs: Category 1 systems are required to provide clear photographs of the spring/wellhead and photographs taken North, Northeast, East, Southeast, South, Southwest, West and Northwest from the spring/well vantage point (facing outward from the spring or well). If the well or spring is enclosed in a building, the photographs shall be taken at a point as near as possible to the well/spring that allows a view of the surrounding property.
2. Area Delineation: The minimum Zone 1 area for Category 1 PWS shall be set as a 250 foot radius of the well or spring. The minimum Zone 2 area shall be set as the area from the 250 foot radius to a 750 foot radius of the well or spring. If the Department determines these radii do not provide sufficient protection for a specific PWS, these zones may be enlarged or modified.
3. Contaminant Source Inventory: Category 1 PWS are required to perform a potential contaminant source inventory within Zones 1 and 2. These sources are to be indicated on a topographic map or other suitable map with a scale of 1:24000 (1 inch = 2000 feet) or better. The wellhead/spring and Zones 1 and 2 must be clearly marked, along with an inventory of sources in tabular form. Guidelines for performing a contaminant source inventory will be included in the published guidance.
4. Wellhead Protection Plan: The Plan to be provided by Category 1 PWS shall consist of the required photographs, Zone 1 and 2 marked on the topographic map, the contaminant source inventory, and the steps the

PWS is taking to protect the area within Zone 1. The steps must include plans for hazardous chemical storage on the property, hazardous chemical use within Zone 1, plans for spill response and may include posting as a wellhead protection area in the immediate vicinity of the well or spring. Other provisions may also be included. Two copies of the Plan shall be provided to the Division of Water Supply.

5. Wellhead Protection Program: Once the Wellhead Protection Plan has been approved by the Department, the PWS shall notify the governing county body and county/regional planning commission that a Wellhead Protection Program is in place and deliver copies of the Plan to such bodies. The PWS shall then implement the Plan and document progress. As a part of wellhead protection, the PWS shall maintain proper management of potential contaminant sources under its control and the proper construction of the spring or well and associated devices as specified in Design Criteria for Community Water Systems as developed under Rule 1200-5-1-.05(3) and in compliance with the provisions of the Water Well Act, T.C.A. 69-11-106 (10).

(b) Category 2 PWS

1. Field Measurements/Photographs: Category 2 systems are required to collect water level elevation data from area wells to determine local ground water flow directions, water table slope (hydrologic gradient) and local ground water recharge basins. Category 2 PWS's are also required to provide the same photographs specified for Category 1 in 1200-5-1-.34(2)(a)1.
2. Area Delineation: The minimum Zone 1 area for Category 2 shall be set as a 500 foot radius of the well or spring.

- (i) For a PWS in counties west of the western extension of the Tennessee River, defined for purposes of this rule as West Tennessee (Figure 1); Zone 2 shall be set as the 10 year Time-of-Travel (TOT). This area shall be calculated with the Environmental Protection Agency's WHPA 2.0 Model, RESSQC Module using the mode which considers well interference. USGS MODFLOW shall be an acceptable alternative. Other modeling techniques must be approved in writing by the Department.

The PWS may perform the modeling of the Wellhead Protection area or may deliver the necessary information to the Department for the modeling of the wellhead protection area. The PWS shall use the generated model to determine the Wellhead Management Zone (Zone 2).

- (ii) For Category 2 PWS in West Tennessee (Figure 1) using aquifers under confined conditions, the PWS's may use the leaky aquifer scenario in the GPTRAC or Monte Carlo module of WHPA 2.0 or the MODFLOW leaky aquifer scenario. For purposes of this rule, all confined aquifers in West Tennessee shall be considered to be leaking.



- (iii) For Category 2 PWS east of the Tennessee River in karst and fractured rock areas (Figure 1), the collected hydrogeologic information shall be used to delineate the upgradient portion of the ground water recharge basin. The PWS may determine the upgradient portion of the recharge basin; or may deliver the information to the Department for assistance in delineating the basin. The delineated basin shall include direct recharge points to the aquifer such as sinkholes and stormwater runoff wells. All of Zone 1 shall be considered to lie within Zone 2.
  
- 3. Contaminant Source Inventory: Category 2 PWS are required to perform a potential contaminant source inventory within the Zones 1 and 2 as further specified in 1200-5-1-.34(2)(a)3. The Wellhead Protection Plan should establish procedures to eliminate or minimize the risk to the PWS from potential contaminant sources.
  
- 4. Wellhead Protection Plan:
  - (i) The Plan to be provided by Category 2 PWS shall consist of the required photographs, zones 1 and 2 marked on a topographic map, the contaminant source inventory and the steps the PWS is taking to protect/manage the wellhead protection area. The steps must include plans for hazardous chemical storage on the property, hazardous chemical use within Zones 1 and 2 and spill response notification in Zone 1. Other steps may be included such as proposed local ordinances. Two copies of the Plan shall be provided to the Division of Water Supply.
  - (ii) The Plan shall also include procedures for reviewing, modifying, and updating the Plan.
  - (iii) The existence of the Plan shall be included in the public water system's Consumer Confidence Report.
  
- 5. Wellhead Protection Program: Once the Wellhead Protection Plan has been approved by the Department, the PWS shall notify the governing county body and county/regional planning commission that a Wellhead Protection Program is in place and deliver copies of the Plan to such bodies. If the Wellhead Protection Zones cross county lines, that adjacent county must be notified. The PWS shall then implement the Plan and document progress. The PWS shall request that it be allowed to review and comment on land management issues in Zones 1 and 2 which may impact the ground water quality from all appropriate local governing bodies.
  - (i) The PWS shall submit to the Division of Water Supply copies of the letters and other documentation to verify and document the compliance with part 5 of this rule.

## (c) Category 3 PWS

- (1) Field Measurements/Photographs: Category 3 systems are required to collect water level elevation data from area wells to determine local ground water flow directions, water table slope (hydrologic gradient) and local ground water recharge basins. This information shall be used by the PWS to generate a model of the wellhead protection area. Category 3 PWS are required to provide the same photographs as set forth for Category 1 in Rule 1200-5-1-.34(2)(a)1. In addition, Category 3 PWS are required to provide aerial photographs of the well/wellfield or spring for Zones 1 and 2.

2. Area Delineation: The minimum Wellhead Protection Zone for Category 3 shall be set as a 750 foot radius of the well or spring.

- (i) For PWS in counties west of the western extension of the Tennessee River defined for purposes of this rule as West Tennessee, the Wellhead Management Zone shall be set as the 10 year Time-of-Travel (TOT).

This area shall be calculated with the Environmental Protection Agency's WHPA 2.0 Model, RESSQC Module using the mode which considers well interference. MODFLOW shall be an acceptable alternative. Other modeling techniques must be approved in writing by the Department.

- (ii) For Category 3 PWS in West Tennessee (Figure 1) using aquifers under confined conditions, the PWS may use the leaky aquifer scenario in the GPTRAC or Monte Carlo module of WHPA 2.0 or the MODFLOW leaky aquifer scenario. For purposes of this rule, all confined aquifers in West Tennessee shall be considered to be leaking.
    - (iii) For closely spaced wells where zones overlap, the zones may be combined for a composite wellhead protection/management zone. The zone cannot be downgraded to lesser protection (Zone 1 areas override Zone 2 areas).
    - (iv) For Category 3 PWS east of the Tennessee River in karst and fractured rock areas (Figure 1), the collected hydrogeologic information shall be used to delineate the upgradient portion of the ground water recharge basin. The Wellhead Management Zone (Zone 2) shall describe the area (inclusive of the Wellhead Protection Zone) that takes in the recharge basin upgradient of the wellhead/spring. The Wellhead Protection Zone (Zone 1) shall include direct recharge points to the aquifer such as sinkholes and stormwater runoff wells. All of Zone 1 shall be considered to lie within Zone 2.

3. Contaminant Source Inventory: Category 3 PWS are required to perform a potential contaminant source inventory within the Wellhead Management (Zone 2) and Wellhead Protection Zones (Zone 1) as set

forth in Rule 1200-5-1-.34(2)(a)3. The Wellhead Protection Plan should establish procedures to eliminate or minimize the risk to the PWS from potential contamination sources.

4. Wellhead Protection Plan:

- (i) The Plan to be provided by Category 3 PWS shall consist of the required photographs, Zones 1 and 2 marked on a topographic map, the contaminant source inventory, and the steps the PWS is taking to protect/manage the wellhead protection area. The steps must at least include plans for hazardous chemical storage on the property, hazardous chemical use within Zones 1 and 2, spill response notification in Zone 1 and proposed local ordinances in cooperation with the city or county government or county/ regional planning commission. Two copies of the Plan must be provided to the Division of Water Supply.
- (ii) The Plan shall also include procedures for reviewing, modifying, and updating the Plan.
- (iii) The existence of the Plan shall be included in the public water system's Consumer Confidence Report.

5. Wellhead Protection Program: Once the Wellhead Protection Plan has been approved by the Department, the PWS shall notify the governing county body and county/regional planning commission that a Wellhead Protection Program is in place and deliver copies of the Plan to such bodies. If the Wellhead Protection Zones cross county lines, that adjacent county must be notified. The PWS shall then implement the Plan and document progress. The PWS shall request that it be allowed to review and comment on land management issues in Zones 1 and 2 which may impact the ground water quality from all appropriate local governing bodies.

(d) Category 4 PWS

- (1) Field Measurements/Photographs: Category 4 systems are required to collect water level elevation data from area wells to determine local ground water flow directions, water table slope (hydrologic gradient) and local ground water recharge basins. Category 4 PWS are required to provide the same photographs as set forth for Category 1 in Rule 1200-5-1-.34(2)(a)1. In addition, Category 4 PWS are required to provide aerial photographs of the well/wellfield or spring for Zones 1 and 2.

2. Area Delineation: The minimum Zone 1 area for Category 4 PWS shall be set as a 750 foot radius of the well or spring.

- (i) For PWS in counties west of the western extension of the Tennessee River, defined for purposes of this rule as West Tennessee (Figure 1), Zone 2 shall be set as the 10 year Time-of-Travel (TOT). This area shall be calculated with the Environmental Protection Agency's WHPA 2.0 Model,

RESSQC Module using the mode which considers well interference. MODFLOW shall be an acceptable alternative. Other modeling techniques must be approved in writing by the Department.

- (ii) For Category 4 PWS in West Tennessee using aquifers under confined conditions, the PWS's may use the leaky aquifer scenario in the GPTRAC or Monte Carlo module of WHPA 2.0 or the MODFLOW leaky aquifer scenario. For purposes of this rule, all confined aquifers in West Tennessee shall be considered to be leaking.
  - (iii) For closely spaced wells where zones overlap, the zones may be combined for a composite wellhead protection/management zone. The zone cannot be downgraded to lesser protection (Zone 1 areas override Zone 2 areas).
  - (iv) For Category 4 PWS east of the Tennessee River in karst and fractured rock areas (Figure 1), the collected hydrogeologic information shall be used to delineate the upgradient portion of the ground water recharge basin. The Wellhead Management Zone (Zone 2) shall describe the area (inclusive of the Wellhead Protection Zone) that takes in the recharge basin upgradient of the wellhead/spring. Zone 2 shall describe the area (inclusive of the Zone 1) that takes in the recharge basin upgradient of the wellhead/spring and shall include direct recharge points to the aquifer such as sinkholes and stormwater runoff wells. All of Zone 1 shall be considered to lie within Zone 2.
3. Contaminant Source Inventory: Category 4 PWS are required to perform a potential contaminant source inventory within the Wellhead Management (Zone 2) and Wellhead Protection Zones (Zone 1) as set forth in Rule 1200-5-1-.34(2)(a)3. The plan should establish procedures to eliminate or minimize the risk to the PWS from potential contaminant sources.
4. Wellhead Protection Plan:
- (i) The Plan to be provided by Category 4 PWS shall consist of the required photographs, Zones 1 and 2 marked on a topographic map, the contaminant source inventory, and the steps the PWS is taking to protect/manage the wellhead protection area. The steps must, at least, include plans for hazardous chemical storage on the property, hazardous chemical use within Zones 1 and 2, spill response notification in Zone 1 and proposed local ordinances in cooperation with the city or county government or county/regional planning commission. Two copies of the Plan shall be provided to the Division of Water Supply.
  - (ii) The Plan shall also include procedures for reviewing, modifying, and updating the Plan.

- (iii) The existence of the Plan shall be included in the public water system's Consumer Confidence Report.

- 5. Wellhead Protection Program: Once the Wellhead Protection Plan has been approved by the Department, the PWS shall notify the governing county body and county/regional planning commission that a Wellhead Protection Program is in place and deliver copies of the Plan to such bodies. If the Wellhead Protection Zones cross county lines, that adjacent county must be notified. The PWS shall then implement the Plan and document progress. The PWS shall request that it be allowed to review and comment on land management issues in Zones 1 and 2 which may impact the ground water quality from all appropriate local governing bodies.

(3) Requirements for New Water Sources

- (a) Prior to the construction of a new water source after the effective date of these Rules, each PWS shall develop a Preliminary Evaluation Report (PER). The PER must include significant potential contaminant sources within a one-mile radius of a ground water source and significant potential contaminant sources within the Critical Source Water Protection Zone of a surface water source as well as an inventory of wastewater and stormwater discharges permitted by the Department within Zone A of the Source Water Management Zone of the intake. The PWS shall submit the PER with the Engineering Plans and Specification to the Department for approval. After a new ground water source is constructed, a Wellhead Protection Plan shall be developed pursuant to these rules. The PWS shall implement the Wellhead Protection Plan within twelve (12) months of completion of construction of the new source. After a new surface water source is developed, the PWS shall establish and maintain a potential contaminant source inventory and the source water provisions of the emergency operations plan. The potential contaminant source inventory shall be submitted to the Department within twelve (12) months of completion of construction of the new source. Each PWS shall notify the governing county body and county/regional planning commission in writing of the intake, critical source water protection zone and source water management zone in Rule 1200-5-1-.34(1)(d).4 and .8, per the Tennessee Safe Drinking Water Act, T.C.A. 68-221-701 et seq.

New water supply sources shall have source approvals in writing by the Department prior to initiation of operation as a public water supply source. An existing water system that was previously not designated as a public water system shall have sixty (60) days upon notification of the determination as a public water system to submit source approval documentation for the Department's review. Source approvals shall include a one-mile radius inventory of significant potential contaminant sources for Category 2, 3 and 4 ground water supplies. Surface water intake inventories shall include significant potential contaminant sources within the Critical Source Water Protection Zone and an inventory of wastewater and stormwater discharges permitted by the Department within Zone A of the Source Water Management Zone.

- (b) A PWS shall consider potential contaminant sources in determining the location of the new ground water source. The PER shall include a comprehensive list of potential contaminant sources within the potential Zone 1 area for new ground water sources. Additionally, the PWS will work with appropriate local governing bodies to limit the future location of any potential contaminant source or activity within Zone 1.
- (c) New PWS wells must receive site approval from the Division before drilling. New well approval is conditioned upon the PWS complying with all sections of the Drinking Water Source Regulations. Approval of new wells by the Division of Water Supply will depend on the ability of the PWS to provide the highest degree of reliable control of the area. The Division may deny its approval for new wells to be put into service if these requirements cannot be met.

(4) Contingency Planning

- (a) Public water systems as a part of their emergency operation plans shall keep up to date the planned contingency procedures to include the notifications roster, response committee designees and other portions of the emergency operations plan pertaining to the contamination of or loss of the existing water sources.

(5) Prohibitions in Source Water Protection Areas

- (a) The discharge by any person of sewage or any other waste or contaminant at such a proximity to the intake, well or spring serving a public water system in such a manner or quantity that it will or will likely endanger the health or safety of customers of the system or cause damage to the system shall be prohibited.
  - 1. Owners or operators of facilities or properties with potential or actual contaminant sources within close proximity to a public water supply intake, well or spring or its source water protection area so as to cause a threat to the water supply may be required by the Department to develop and implement a pollution prevention plan or implement best management practices appropriate for the activity. The pollution prevention plan shall be prepared in accordance with good engineering practices and shall identify potential sources of contamination at the facility that may reasonably be expected to affect the water quality. The plan shall be updated annually and submitted to the Department at no more than 3 year intervals. The plan shall describe and ensure implementation of practices including, but not limited to: diking, liners, covering, containment, relocation of the contaminant source or other actions that are to be used to reduce the likelihood of the contaminants entering the drinking water source. A copy of the pollution prevention plan shall be maintained onsite. A pollution prevention plan developed as a part of storm water management activities under Rule 1200-4-10-.04, T.C.A. 69-3-101 et seq. shall be considered as fulfilling this requirement provided that potential ground water contaminant sources are also addressed within the plan.
  - 2. The Department may require onsite or offsite water quality monitoring, removal or remediation of the contaminant source by the property owner or other responsible party for contaminant sources within source water protection areas which have caused contamination of the ground water or surface water at levels that have adversely impacted the public water source to the point that additional monitoring and treatment are required for the public water system. Sites undergoing active investigation pursuant to remediation under the Hazardous

Waste Management Act Parts 1 and 2, T.C.A. 68-212-101 et seq. and 68-212-201 et seq., respectively or the Voluntary Cleanup, Oversight and Assistance Program Act, T.C.A. 68-212-224 shall be considered as fulfilling this requirement for remediation activities to protect the impacted public water system.

3. Abandoned wells within wellhead protection areas which are a potential threat to contamination of the public water supply shall be properly plugged and closed in compliance with provisions in the Water Well Act, T.C.A. 69-11-106 (11) by the property owner or other responsible party. A well that has not been in use for a period of more than two (2) years shall be considered abandoned unless the owner of the well can demonstrate a need for the well and provide adequate protection to ensure the well will not be a discharge point for contamination.
- (b) The heavy pumping or other heavy withdrawal of water from a public water system or its water supply source in a manner that would interfere with existing customers' normal and reasonable needs or threaten existing customers' health and safety.
  1. Water withdrawal from sources within source water protection areas that are required to register under the Water Resources Information Act, T.C.A. 69-8-103 shall be required to demonstrate through modeling, testing or other hydrologic means that the public water supply will not be adversely impacted by the withdrawal.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

The language of subparagraph (d) of paragraph (1) of Rule 1200-5-1-.35 Consumer Confidence Reports is deleted in its entirety and new language added so that as amended subparagraph shall read:

- (d) For the purpose of 1200-5-1-.35, detected means: at or above the levels prescribed by Table 1200-5-1-.09(1)(d) for inorganic contaminants, at or above the levels prescribed by 1200-5-1-.26 for volatile organic chemicals, by Table 1200-5-1-.10(1)(r) for other organic chemicals, and at or above the levels prescribed by 1200-5-1-.11(3) for radioactive contaminants.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

#### Amendments

The language of Part 6 of subparagraph (h) of paragraph (3) of Rule 1200-5-1-.35 Consumer Confidence Reports is deleted in its entirety and replaced with the following language:

6. A public water system's report must include a statement that the wellhead protection plan and source water assessment are available for public review and identify the contact person, location, and time available for review of the plan.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

The language of subparagraph (e) of paragraph (4) of Rule 1200-5-1-.35 Consumer Confidence Reports is deleted in its entirety and the existing subparagraph (f) is renumbered to subparagraph (e) so that as amended it shall read:

- (c) Beginning in the report due by July 1, 2002, and ending January 22, 2006, a community water system that detects arsenic above 0.01 mg/L and up to and including 0.05 mg/L must include the arsenic health effects language prescribed by Appendix A to 1200-5-1-.35.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Part 5 only of subparagraph (a) of paragraph (6) of Rule 1200-5-1-.36 Disinfectants and Disinfection Byproducts is deleted in its entirety and new language substituted so that as amended part 5 shall read:

5. Systems may use only data collected under the provisions of this Rule to qualify for reduced monitoring.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

Amendments

Part 3 only of subparagraph (a) of paragraph (7) of Rule 1200-5-1-.36 Disinfectants and Disinfection Byproducts is deleted in its entirety and new language substituted so that as amended part 3 shall read:

3. If, during the first year of monitoring under 1200-5-1-.36(6), any individual quarter's average will cause the running annual average of that system to exceed the MCL for total trihalomethanes, haloacetic acids (five) or bromate; or the MRDL for chlorine or chloramines, the system is out of compliance at the end of that quarter.

Rulemaking Authority: T.C.A. Sections 68-221-704 and T.C.A. Section 4-5-202

Substantive Authority: T.C.A. Sections 68-221-701 et. seq.

I certify that this an accurate and complete representation of the intent and scope of the rulemaking proposed by the Department.

\_\_\_\_\_  
(Name)  
(Director)

Subscribed and sworn to before me on the \_\_\_\_ day of \_\_\_\_\_, 200\_\_.

\_\_\_\_\_  
(Signature)  
Notary Public

My commission expires on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.



The notice of rulemaking set out herein was properly filed in the Department of State on the \_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

\_\_\_\_\_  
(Signature)  
(Name of Secretary of State)  
Secretary of State

By: \_\_\_\_\_